Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application.

Listing of Claims:

1. (Currently Amended) A process of production of a high strength galvannealed steel sheet, comprising continuously hot-dip galvanizing a high strength steel sheet having a content of Si of 0.4 to 2.0 wt% during which making the atmosphere of ~~the~~ a reducing zone an atmosphere containing H_2 to 1 to 60 wt% and ~~comprised of~~ the balance ~~of~~ being N_2, H_2O, O_2, CO_2, CO, and unavoidable impurities, controlling, in the atmosphere, the $\log(PCO_2/PH_2)$ of the carbon dioxide partial pressure and hydrogen partial pressure to $\log(PCO_2/PH_2) \leq -0.5$, the $\log(P$~~CO_2~~ $H_2O/PH_2)$ of the water partial pressure and hydrogen partial pressure to $\log(PH_2O/PH_2) \leq -0.5$, and the $\log(P_T/PH_2)$ of the total partial pressure P_T of the carbon dioxide partial pressure PCO_2 and water partial pressure PH_2O and the hydrogen partial pressure to $-3 \leq \log(P_T/PH_2) \leq -0.5$, performing ~~the~~ annealing in the reducing zone in a ferrite-austenite two-phase temperature region at 720°C to 880°C, then cooling by a plating bath and performing ~~the~~ molten zinc plating so as to form a hot-dip galvanizing layer on the surface of the ~~cold rolled~~ high strength steel sheet, and then heating for alloying the steel sheet on which the hot-dip galvanizing layer is formed at 460 to 550°C, so as ~~it is possible~~ to produce a high strength galvannealed steel sheet, wherein the annealing and plating are carried out in an all radiant tube type annealing furnace without an oxidizing zone.

2. (Currently Amended) A process of production of a high strength galvannealed steel sheet as set forth in claim 1, characterized by performing the hot-dip galvanizing in a hot-dip galvanizing bath of a composition comprised of an effective Al concentration in the bath of at least 0.07 wt% and the balance ~~of~~ being Zn and unavoidable impurities and performing the alloying at a temperature T (°C) satisfying

$$450 \leq T \leq 410 \times \exp(2\times[Al\%])$$

where, [Al%]: effective Al concentration (wt%) in the hot-dip galvanizing bath.

3. (Currently Amended) A process of production of a high strength galvannealed steel sheet as set forth in claim 1 ~~superior in bondability~~, ~~characterized by being performed at an~~ the effective Al concentration (wt%) in the bath satisfying ~~the effective Al concentration in the bath of:~~

$$[Al\%] \leq 0.092\text{-}0.001\times[Si\%]^2$$

where, [Si%]: Si content in steel sheet (wt%).

4-5. (Canceled).